Docket No: FUERTES-LOPEZ

Appl. No: 10/816,591

## AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1-23 (Cancelled)

24. (New) A vaccine for vaccinating a living being against infections by leishmania, the said vaccine comprising:

a DNA expression construct comprising covalently-closed, linear deoxyribonucleotide molecules;

said deoxyribonucleotide molecules each comprising a linear doublestranded region;

said double-stranded region comprising single strands being linked by short, single-stranded loops of deoxyribonucleic acid nucleotides;

said double strand-forming single strands comprising:

a terminator sequence, and

a coding sequence encoding at least the p36 LACK antigen under control of a promoter sequence and operable in the living being to be immunized;

said DNA expression construct being covalently linked to at least one oligopeptide to increase transfection efficacy;

said at least one oligopeptide comprises 3 to 30 amino acids; at least half of said amino acids of said at least one oligopeptide are members of a group comprising arginine and lysine: wherein the vaccine further comprises at least one oligopeptide consisting of the amino acid sequence of SEQ ID 3.